

We Claim:

1. A camming mechanism for maintaining a predetermined spacing between a pair of nesting, slidably relative sleeve members, said pair of sleeve members including a first sleeve having an outer longitudinally  
5 extending wall surface and a second sleeve member having an inner longitudinally extending wall surface laterally spaced from said outer wall surface, said camming mechanism comprising:

10 a longitudinally extending guide rail secured to one of said sleeve members, said guide rail having oppositely disposed, parallel camming guide surfaces; and  
a pair of oppositely disposed spaced apart cam followers, each of said cam followers being in  
15 longitudinally guiding contact with a respective one of said parallel cam surfaces.

2. The camming mechanism according to claim 1 wherein said cam followers are rotatably secured to the other of said sleeve members.

20 3. The camming mechanism according to claim 1 further comprising a second pair of cam followers having at least one of said second pair of cam followers in longitudinally guiding contact with said respective one of said parallel guide surfaces, said second pair of cam  
25 followers longitudinally spaced apart from said first pair of cam followers.

4. The camming mechanism according to claim 1 wherein said guide rail is axially aligned with said one of said sleeve members.

30 5. A support column for an examination table having an adjustable height, said column comprising:

at least two nesting sleeve sections, said sleeve sections being slidable relative to one another;  
means for maintaining a predetermined spacing  
35 between an adjacent pair of said nesting sleeve sections,

said means comprising:

at least one longitudinally extending guide  
rail secured to one of said adjacent sleeve sections,  
said guide rail having oppositely disposed parallel  
5 guiding cam surfaces;

at least one pair of oppositely disposed  
spaced apart cam followers being longitudinally in  
guiding contact with a respective one of said parallel  
cam surfaces, said cam followers supported by the other  
10 of said adjacent sleeve sections; and

means for sliding said sleeve sections  
relative to one another.

6. The support column according to claim 5  
wherein said each of said adjacent nesting sleeve  
15 sections includes surfaces, said surfaces facing surfaces  
of the other of said adjacent sleeve, said facing  
surfaces defining a polygonal spaced relationship, said  
facing surfaces supporting said spacing means.

7. The column according to claim 6 wherein  
20 each of said nesting sleeves is rectangular in shape.

8. The column according to claim 5 wherein  
said sliding means comprises a linear actuator.

9. The column according to claim 5 further  
comprising a second pair of oppositely disposed spaced  
25 apart cam followers being in longitudinally guiding  
contact with a respective one of said parallel guide  
surfaces, said second pair of cam followers latitudinally  
spaced apart from said first pair of cam followers.

10. An adjustable examination table  
30 comprising:

a support table;

a stationary base; and

an adjustable height column, said column

comprising:

35 a plurality of sleeve sections, said sleeve

sections slidably, nestingly connected to one another, one of said sleeve sections attached to said stationary base, another of said sleeve sections attached to said support table;

5           at least one longitudinally extending guide rail secured to one of said sleeve sections, said guide rail having oppositely disposed parallel guide surfaces;

          at least one pair of oppositely disposed spaced apart cam followers being longitudinally in  
10       guiding contact with a respective one of said parallel guide surfaces; and

          means for sliding said sleeve sections relative to one another.

11. The table according to claim 10 further  
15       comprising a second pair of oppositely disposed spaced apart cam followers being in longitudinally guiding contact with a respective one of said parallel guide surfaces, said second pair of cam followers latitudinally  
20       spaced apart from said first pair of cam followers, said second pair of cam followers providing support for a patient on said support table.

12. The table according to claim 11 providing up to at least 450 pounds support for said patient in a cantilevered position.

25           13. The table according to claim 10 wherein at least one of said guide rails is secured to one of each nesting pair of said sleeve sections, said cam followers are rotatably connected to other of said nesting pair of said sleeve sections.

30           14. The table according to claim 10 wherein said sliding means comprises at least one linear actuator.

15. The table according to claim 13 wherein  
35       said column further comprises a lower sleeve section, a middle sleeve section, and an upper sleeve section,

said lower sleeve section attached to said base,

said upper sleeve section attached to said support table, and

5           said middle sleeve section located between said lower sleeve section and said upper sleeve section, said middle sleeve section having an inner wall and an outer wall, at least one of said guide rails attached to said inner wall and at least one of said guide rails  
10 attached to said outer wall.

16. The table according to claim 15 wherein the height is adjustable within a range of at least more than 19 inches.

17. The table according to claim 16 wherein  
15 the height is adjustable within a range of at least about 23 inches.

18. The table according to claim 16 wherein the height is adjustable to a maximum height of at least 39 inches and a minimum height of at least below 20  
20 inches.